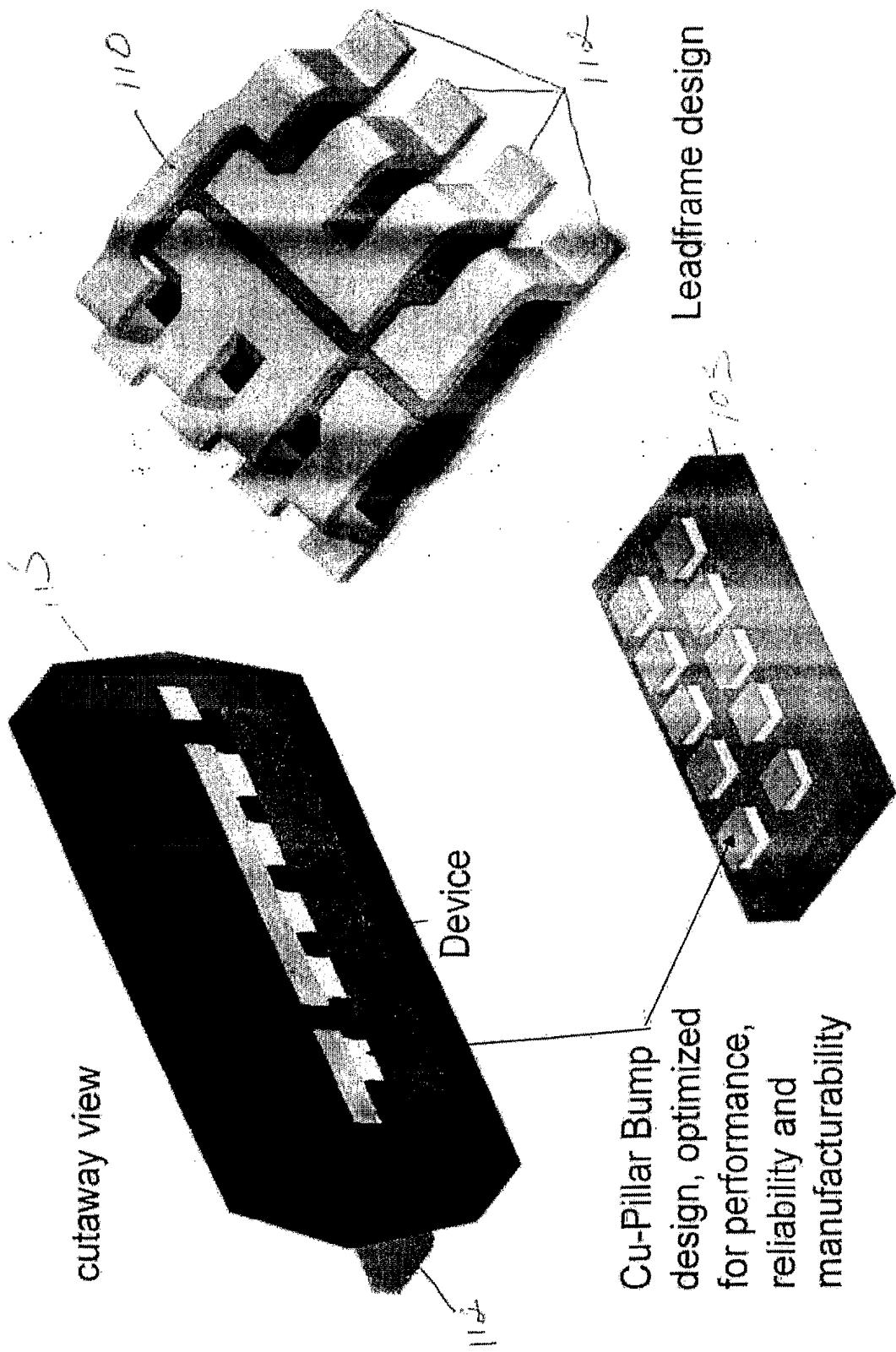


FIGURE 1

FIGURE 2A



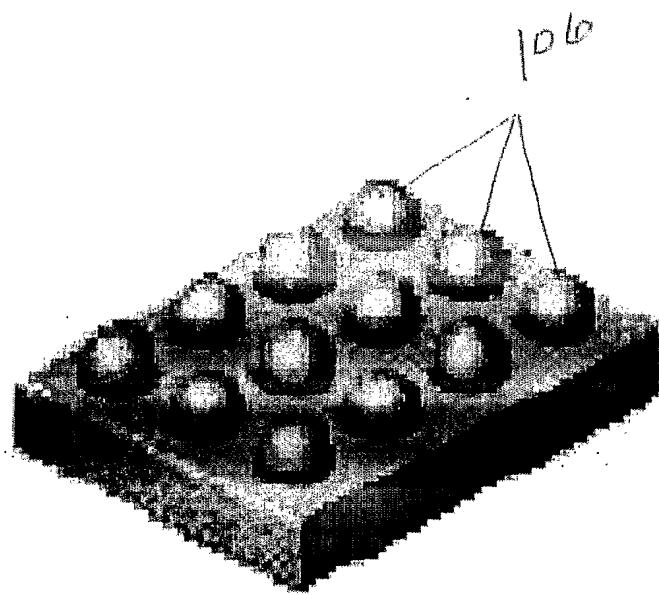
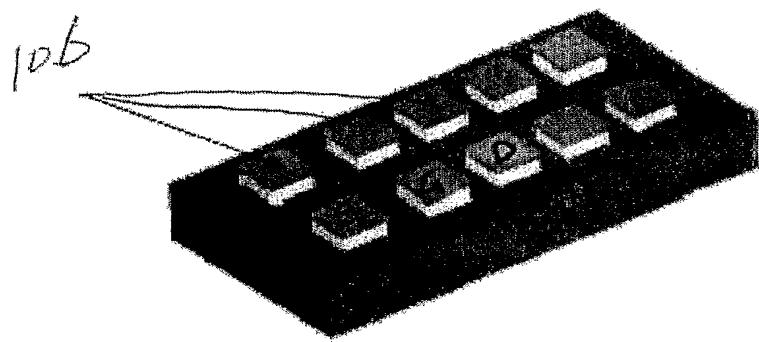


FIGURE 2B

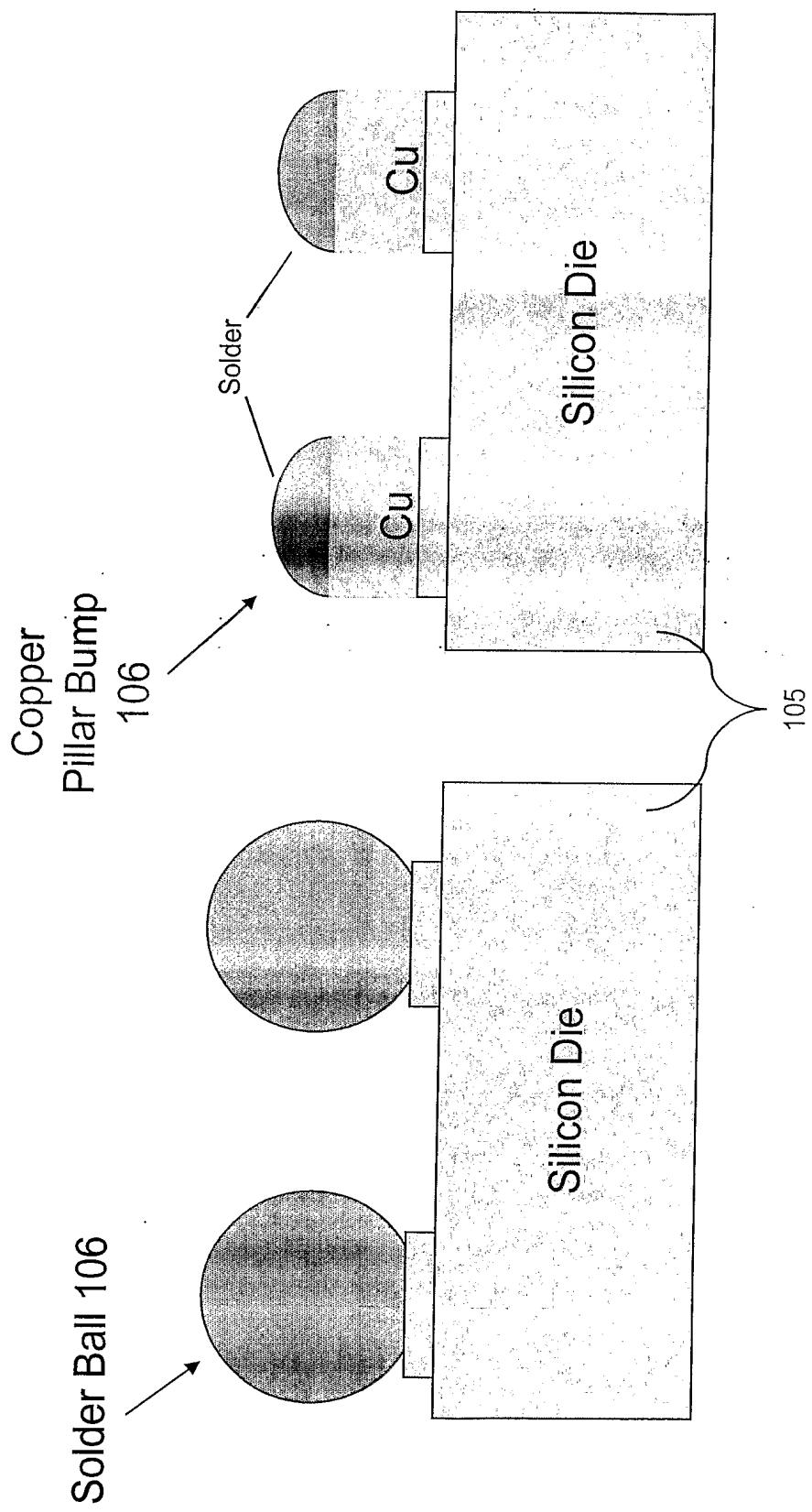


FIG. 2C

FIGURE 3

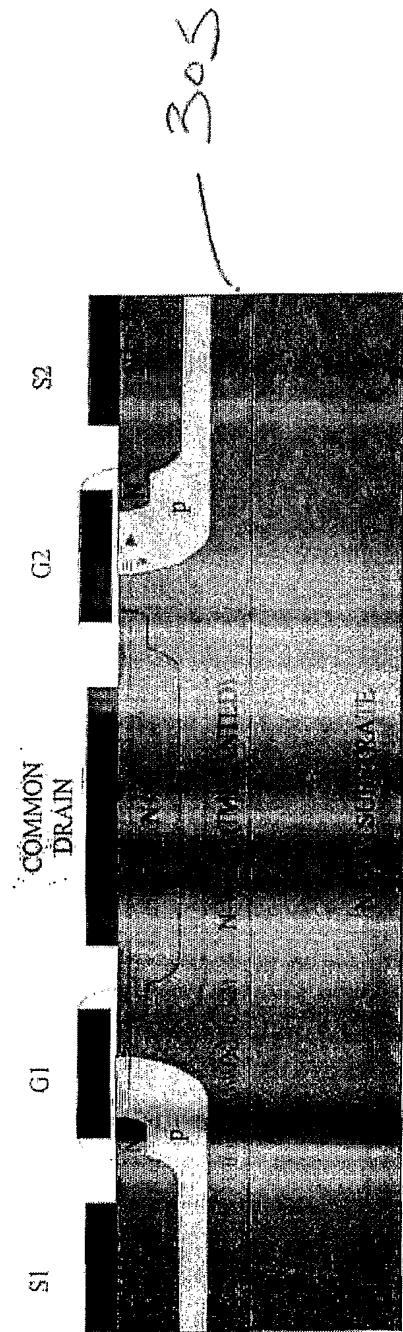
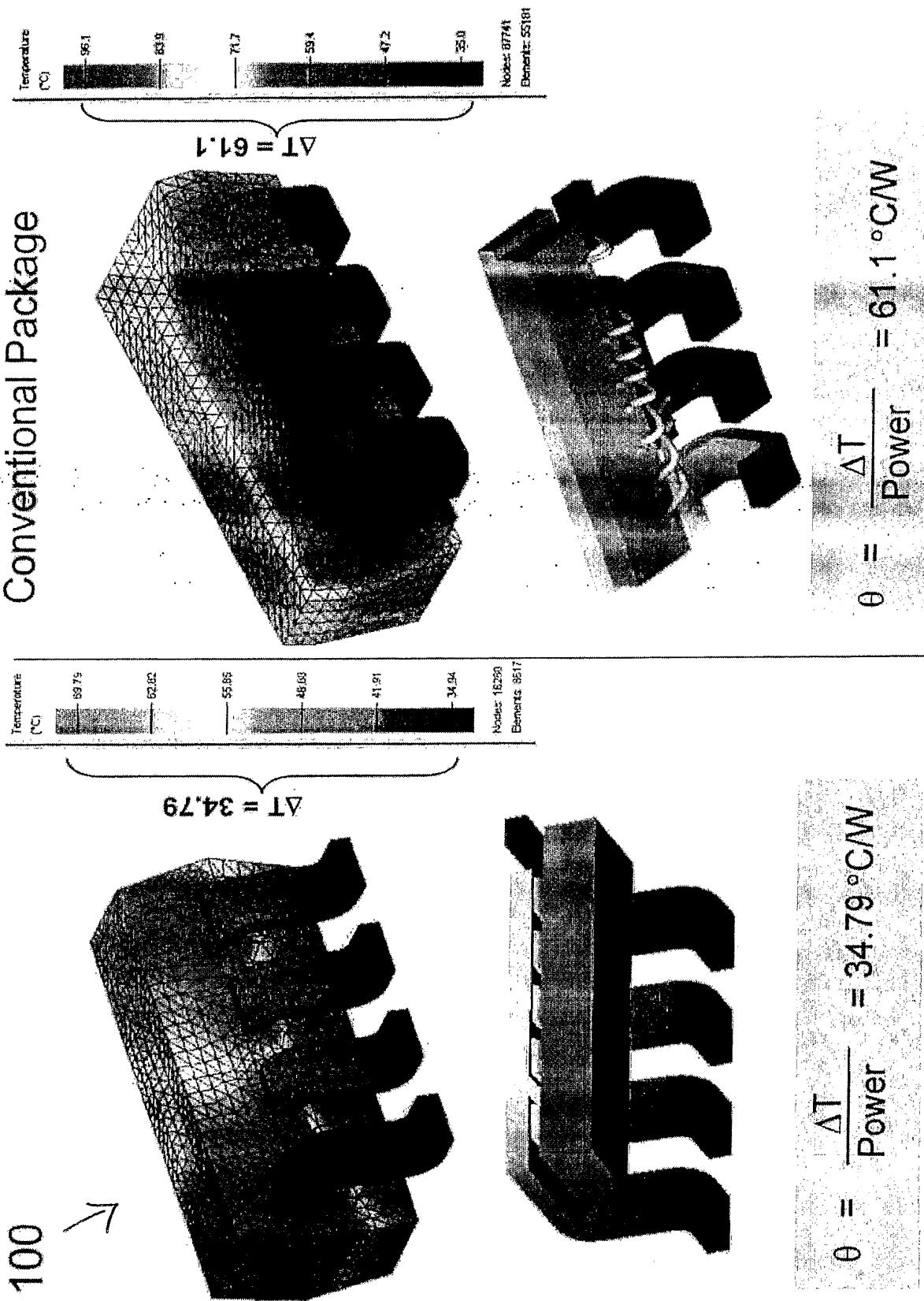


FIGURE 4

Conventional Package



Summary of Results

FIGURE 5

Analysis	CONVENTIONAL PACKAGE		INVENTION 100	
	R_{CN}	R_{CN}	R_{CN}	R_{CN}
Mold Compound	2.35E+08	7.16E+07	2.35E+08	7.16E+07
Leadframe	1.06E+08	8.14E+07	1.06E+08	8.14E+07
Die	2.35E+08	5.73E+07	2.35E+08	5.73E+07
Solder on Pillars				
Cu Pillars				
Gold wirebonds				
Die attach	2.35E+08	6.21E+07	2.35E+08	6.21E+07
Max Displacement	6.51E+07	9.90E+07	3.1 μ M	1.93 μ M
Mold Compound	2.48E+08	1.28E+08	2.48E+08	1.28E+08
Leadframe	2.99E+08	3.28E+08	2.99E+08	3.28E+08
Die	2.48E+08	1.08E+08	2.48E+08	1.08E+08
Solder on Pillars				
Cu Pillars				
Gold wirebonds				
Die attach	2.48E+08	1.14E+08	2.48E+08	1.14E+08
Max Displacement	9.32E+07	1.78E+08	4.0 μ M	5.3 μ M
Mold Compound	2.29E+08	1.18E+08	2.29E+08	1.18E+08
Leadframe	2.76E+08	3.02E+08	2.76E+08	3.02E+08
Die	2.29E+08	9.99E+07	2.29E+08	9.99E+07
Solder on Pillars				
Cu Pillars				
Gold wirebonds				
Die attach	2.29E+08	1.06E+08	8.60E+07	1.63E+08
Max Displacement	3.7 μ M	4.9 μ M		

Fig. 6

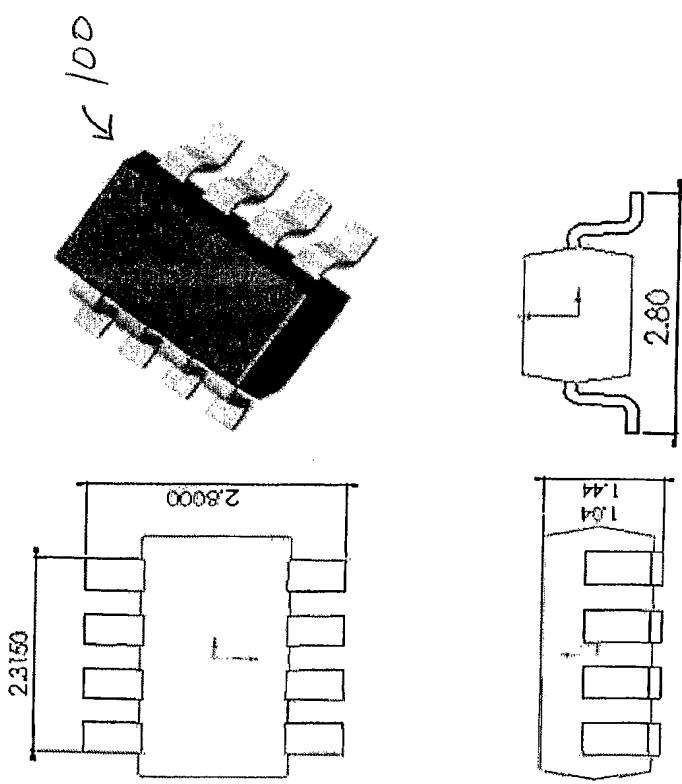
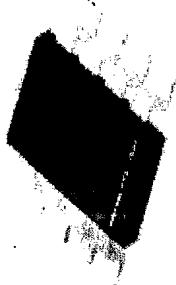


Fig. 7

100



Notes:

1. Dimensions and Tolerances per ANSI Y14.5M, 1982.
2. Mirror finish on package surface.
3. Footlength measured based on the gauge plane method.
4. Dimension exclusive of mold flash and gate burr.
5. Dimension exclusive of solder plating.



